

REMARKS

Allowable Subject Matter

The indication that claims 4-6 and 34-39 define allowable subject matter and would be allowed if rewritten in independent form is acknowledged with appreciation.

Claim 4/3/1 has been rewritten in independent form by amending claim 4 and hence amended claim 4 is believed to now be in a proper form and condition for allowance and such action is respectfully requested.

Claim 5 is directly dependent on claim 4 and hence should also be allowed. Each of claims 13 and 14 have been amended to be directly dependent on claim 4 and hence are believed to now be in a proper form and condition for allowance.

Claim 6/1 has been rewritten in independent form by amending claim 6 and is believed to now be in a proper form and condition for allowance and such action is requested.

Allowable claim 34/32 has been rewritten in independent form by amending independent claim 32 and canceling without prejudice claim 34. Hence, claim 32 is believed to now be in a proper form and condition for allowance and such action is requested. Each of claims 33, 35-39 and as amended, claims 15-21, 23, and 25-31 is ultimately dependent on amended independent claim 32 and hence is believed to define novel and patentable subject matter for at least the reasons claim 34/32 was deemed to do so and is believed to now be in a proper form and condition for allowance and such action is requested.

Each of claims 22 and 24 has been cancelled without prejudice.

Rejection of Claim 1

Original claim 1 was rejected only under §102(b) as being anticipated by Fournier U.S. patent 5,647,328.

Fournier '328

Fournier shows a fuel pump module 10 with an electric fuel pump 14 which supplies fuel through a high pressure outlet 42 to a fuel injected engine with a so-called no return system in which none of the fuel is returned from the engine even though the quantity of fuel needed to operate the engine varies significantly depending on the varying load placed on the engine. Therefore, to maintain a substantially constant pressure of the fuel supplied to the engine, a pressure regulator 22 by-passes the excess fuel supplied by the pump (and not consumed by the engine) through its outlet 28 to a reservoir 80 with an open top 106 through which excess fuel flows back into the tank 12 when the reservoir is full. Fuel also flows by gravity out of the bottom of the reservoir through an orifice 90 in a plate 30 of the bottom of the reservoir and normally through the interior of the filter 18 to return to the inlet 16 of the electric pump. The orifice 90 is sized to insure that in normal operation, the reservoir tube 80 will be substantially completely filled with fuel discharged from the outlet 28 of the by-pass pressure regulator 22 (Col 10, Lines 8-24). The fuel pump inlet also communicates through the filter with the fuel tank 12 from which it receives most of the fuel which flows through the pump 14.

Applicants respectfully disagree with the contention in the Office Action that Fournier discloses a nozzle, a venturi 28, a venturi spaced from any nozzle and/or any return line 94. Item 94 is a cylindrical portion of the housing 96 of the pressure regulator 22 (Col 10, Lines 42-43) and item 28 is simply the outlet of the pressure regulator (Col 8, Line 9) for the fuel by-passed by the pressure

regulator 22 to maintain a substantially constant pressure of the fuel supplied to the engine by the pump.

The internal construction of the pressure regulator 22 is not described in Fournier and it is well known to persons skilled in the art that typically by-pass pressure regulators are diaphragm actuated devices which do not contain any nozzle or any venturi. Nowhere does Fournier explicitly disclose any nozzle or any venturi.

Amended Claim 1 is Novel

Amended claim 1 is not anticipated by and is novel over Fournier because it defines a fuel pump module having among other things

- (1) a nozzle,
- (2) an inlet of the nozzle in fluid communication with an outlet of pressurized fuel of the high pressure pump,
- (3) at least one restrictor plate received between the outlet of the fuel pump and the inlet of the nozzle, and
- (4) an orifice of the restrictor plate upstream of the inlet of the nozzle and restricting the flow of fuel to the nozzle.

Hence, Fournier does not disclose any of these elements nor their construction and arrangement as defined by claim 1, much less all of these elements. Thus, amended claim 1 is novel over and not anticipated by Fournier. Moreover, for at least these reasons, amended claim 1 defines patentable subject matter under §103 over Fournier whether considered alone or in combination with the other references of record.

Accordingly, reconsideration and allowance of amended claim 1 as defining novel and patentable subject matter is requested.

Dependent Claims 2, 3 & 7-11

As amended, each of claims 2, 3, 7-11 is ultimately dependent on amended independent claim 1 and hence defines novel and patentable subject matter over Fournier, whether considered alone or in combination with the other cited references, for at least the foregoing reasons.

Conclusion

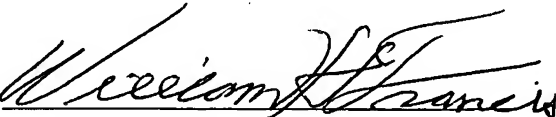
As amended, each of the remaining claims 1-11, 13-21, 23 and 25-39 defines novel and patentable subject matter for at least the foregoing reasons and is believed to read on the species elected subject to traverse. Accordingly, reconsideration and allowance of these claims as amended is respectfully requested.

If, after considering this Response, the Examiner is of the view that any of the claims are not in a condition for allowance, a telephone interview with applicants' undersigned attorney William Francis is requested so that immediate consideration can be given to any further amendments suggested by the Examiner or otherwise needed to place all of the claims in a condition for allowance. The Examiner is requested to initiate or schedule this interview by telephoning William Francis at (248) 689-3500, Ext. 153, who can normally be reached Monday through Friday between 9:00 A.M. and 5:00 P.M.

We believe there are no additional claim fees due with this Response. However, if the Patent Office determines otherwise, it is hereby authorized and respectfully requested that any additional claim fees be charged to our Deposit Account No. 50-0852.

Respectfully submitted,
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WHF:sal

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